RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10 15 10 113

Date Processed by STIC:

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 02/05/2007
PATENT APPLICATION: US/10/757,077B TIME: 14:53:27

Input Set : A:\17355CIP3SEQLIST.TXT
Output Set: N:\CRF4\02052007\J757077B.raw

4 <110> APPLICANT: Steward, Lance E. Fernandez-Salas, Ester 5 Herrington, Todd 6 7 Aoki, Kei Roger 9 <120> TITLE OF INVENTION: Clostridial Neurotoxin Compositions and 10 Modified Clostridial Neurotoxins 13 <130> FILE REFERENCE: 17355CIP3 (BOT) 15 <140> CURRENT APPLICATION NUMBER: US 10/757,077B 16 <141> CURRENT FILING DATE: 2004-01-14 18 :150> PRIOR APPLICATION NUMBER: US 09/910,346 19 <151> PRIOR FILING DATE: 2001-07-20 21 <150> PRIOR APPLICATION NUMBER: US 09/620,840 22 <151> PRIOR FILING DATE: 2000-07-21 24 <150> PRIOR APPLICATION NUMBER: US 10/163,106 25 <151> PRIOR FILING DATE: 2003-06-04 27 <160> NUMBER OF SEQ ID NOS: 83 29 <170> SOFTWARE: FastSEQ for Windows Version 4.0 31 <210> SEQ ID NO: 1 32 <211> LENGTH: 7 33 <212> TYPE: PRT 34 <213> ORGANISM: Clostridium botulinum serotype A 36 <400> SEQUENCE: 1 37 Phe Glu Phe Tyr Lys Leu Leu 41 <210> SEQ ID NO: 2 42 <211> LENGTH: 7 43 <212> TYPE: PRT 44 <213> ORGANISM: Rattus norvegicus 46 <400> SEQUENCE: 2 47 Glu Glu Lys Arg Ala Ile Leu 51 <210> SEQ ID NO: 3 52 <211> LENGTH: 7 53 <212> TYPE: PRT 54 <213> ORGANISM: Rattus norvegicus 56 <400> SEQUENCE: 3 57 Glu Glu Lys Met Ala Ile Leu 58 1 61 <210> SEQ ID NO: 4 62 <211> LENGTH: 7 63 <212> TYPE: PRT 64 <213> ORGANISM: Rattus norvegicus

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66 <400> SEQUENCE: 4

RAW SEQUENCE LISTING DATE: 02/05/2007 PATENT APPLICATION: US/10/757,077B TIME: 14:53:27

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Input Set : A:\17355CIP3SEQLIST.TXT

Output Set: N:\CRF4\02052007\J757077B.raw

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67 Ser Glu Arg Asp Val Leu Leu
   68 1
   71 <210> SEQ ID NO: 5
   72 <211> LENGTH: 7
   73 <212> TYPE: PRT
   74 <213> ORGANISM: Rattus norvegicus
   76 <400> SEQUENCE: 5
   77 Val Asp Thr Gln Val Leu Leu
   81 <210> SEQ ID NO: 6
   82 <211> LENGTH: 7
   83 <212> TYPE: PRT
   84 <213> ORGANISM: Mus musculus
   86 <400> SEQUENCE: 6
   87 Ala Glu Val Gln Ala Leu Leu
   88 1
   91 <210> SEQ ID NO: 7
   92 <211> LENGTH: 7
... 93 <212> TYPE: PRT
   94 <213> ORGANISM: Xenopus laevis
   96 <400> SEQUENCE: 7
   97 Ser Asp Lys Gln Asn Leu Leu
   98 1
   101 <210> SEQ ID NO: 8
   102 <211> LENGTH: 7
   103 <212> TYPE: PRT
   104 <213> ORGANISM: Gallus gallus
   106 <400> SEQUENCE: 8
   107 Ser Asp Arg Gln Asn Leu Ile
   108 1
   111 <210> SEQ ID NO: 9
   112 <211> LENGTH: 7
   113 <212> TYPE: PRT
   114 <213> ORGANISM: Ovis aries
   116 <400> SEQUENCE: 9
   117 Ala Asp Thr Gln Val Leu Met
   118 1
   121 <210> SEQ ID NO: 10
   122 <211> LENGTH: 7
   123 <212> TYPE: PRT
   124 <213> ORGANISM: Homo sapiens
   126 <400> SEQUENCE: 10
   127 Ser Asp Lys Asn Thr Leu Leu
   128 1
   131 <210> SEQ ID NO: 11
   132 <211> LENGTH: 7
   133 <212> TYPE: PRT
   134 <213> ORGANISM: Homo sapiens
   136 <400> SEQUENCE: 11
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TIME: 14:53:27

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Input Set : A:\17355CIP3SEQLIST.TXT
                    Output Set: N:\CRF4\02052007\J757077B.raw
    137 Ser Gln Ile Lys Arg Leu Leu
    141 <210> SEQ ID NO: 12
    142 <211> LENGTH: 7
    143 <212> TYPE: PRT
    144 <213> ORGANISM: Homo sapiens
    146 <400> SEQUENCE: 12
 * 147 Ala Asp Thr Gln Ala Leu Leu
    148 1
    151 <210> SEQ ID NO: 13
    152 <211> LENGTH: 7
    153 <212> TYPE: PRT
    154 <213> ORGANISM: Saccharomyces cerevisiae
    156 <400> SEQUENCE: 13
    157 Asn Glu Gln Ser Pro Leu Leu
    158 1
    161 <210> SEQ ID NO: 14
    162 <211> LENGTH: 12
    163 <212 > TYPE: PRT
    164 <213> ORGANISM: Clostridium botulinum serotype A
    166 <400> SEQUENCE: 14
    167 Met Pro Phe Val Asn Lys Gln Phe Asn Tyr Lys Asp
    168 1
    171 <210> SEQ ID NO: 15
    172 <211> LENGTH: 11
    173 <212> TYPE: PRT
    174 <213> ORGANISM: Clostridium botulinum serotype A
    176 <400> SEQUENCE: 15
    177 Pro Phe Val Asn Lys Gln Phe Asn Tyr Lys Asp
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                                            10
    181 <210> SEQ ID NO: 16
    182 <211> LENGTH: 4
    183 <212> TYPE: PRT
    184 <213> ORGANISM: Clostridium botulinum serotype A
    186 <400> SEQUENCE: 16
    187 Met Tyr Lys Asp
    188 1
    191 <210> SEQ ID NO: 17
    192 <211> LENGTH: 7
    193 <212> TYPE: PRT
    194 <213> ORGANISM: Artificial Sequence
    196 <220> FEATURE:
    197 <221> NAME/KEY: SITE
    198 <222> LOCATION: (1)...(7)
    199 <223> OTHER INFORMATION: Consensus sequence for Leucine-based motif.
    201 <221> NAME/KEY: VARIANT
    202 <222> LOCATION: (1)...(1)
    203 <223> OTHER INFORMATION: Xaa is any amino acid.
W--> 205 <221> VARIANT
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/757,077B

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TIME: 14:53:27
                      PATENT APPLICATION: US/10/757,077B
                      Input Set : A:\17355CIP3SEQLIST.TXT
                      Output Set: N:\CRF4\02052007\J757077B.raw
       206 <222> LOCATION: (3)...(5)
       207 <223> OTHER INFORMATION: Xaa is any amino acid.
  W--> 209 <400> 17
  W--> 210 Xaa Asp Xaa Xaa Xaa Leu Leu
       211 1
       214 <210> SEQ ID NO: 18
       215 <211> LENGTH: 7
       216 <212> TYPE: PRT -
       217 <213> ORGANISM: Artificial Sequence
       219 <220> FEATURE:
       220 <221> NAME/KEY: SITE
       221 <222> LOCATION: (1)...(7)
       222 <223> OTHER INFORMATION: Consensus sequence for Leucine-based motif.
       224 <221> NAME/KEY: VARIANT
       225 <222> LOCATION: (1)...(1)
      '226 <223> OTHER INFORMATION: Xaa is any amino acid.
  W--> 228 <221> VARIANT
       229 <222> LOCATION: (3)...(5)
230 <223> OTHER INFORMATION: Xaa is any amino acid.
  W--> 232 <400> 18
  W--> 233 Xaa Glu Xaa Xaa Xaa Leu Leu
       234 1
       237 <210> SEO ID NO: 19
       238 <211> LENGTH: 7
       239 <212> TYPE: PRT
       240 <213> ORGANISM: Artificial Sequence
       242 <220> FEATURE:
       243 <221> NAME/KEY: SITE
       244 <222> LOCATION: (1)...(7)
       245 <223> OTHER INFORMATION: Consensus sequence for Leucine-based motif.
       247 <221> NAME/KEY: VARIANT
       248 <222> LOCATION: (1)...(1)
       249 <223> OTHER INFORMATION: Xaa is any amino acid.
  W--> 251 <221> VARIANT
       252 <222> LOCATION: (3)...(5)
       253 <223> OTHER INFORMATION: Xaa is any amino acid.
  W--> 255 <400> 19
  W--> 256 Xaa Asp Xaa Xaa Xaa Leu Ile
       257 1
       260 <210> SEQ ID NO: 20
       261 <211> LENGTH: 7
       262 <212> TYPE: PRT
       263 <213> ORGANISM: Artificial Sequence
       265 <220> FEATURE:
       266 <221> NAME/KEY: SITE
       267 <222> LOCATION: (1)...(7)
       268 <223> OTHER INFORMATION: Consensus sequence for Leucine-based motif.
       270 <221> NAME/KEY: VARIANT
       271 <222> LOCATION: (1)...(1)
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RAW SEQUENCE LISTING

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PATENT APPLICATION: US/10/757,077B
                                                                                                                                   TIME: 14:53:27
                                             Input Set : A:\17355CIP3SEQLIST.TXT
                                             Output Set: N:\CRF4\02052007\J757077B.raw
          272 <223> OTHER INFORMATION: Xaa is any amino acid.
W--> 274 <221> VARIANT
          275 <222> LOCATION: (3)...(5)
          276 <223> OTHER INFORMATION: Xaa is any amino acid.
W--> 278 < 400 > 20
W--> 279 Xaa Asp Xaa Xaa Xaa Leu Met
                                                        5
          280 1
   ··· 283 <210> SEQ ID NO: 21
          284 <211> LENGTH: 7
          285 <212> TYPE: PRT
          286 <213> ORGANISM: Artificial Sequence
          288 <220> FEATURE:
          289 <221> NAME/KEY: SITE
          290 <222> LOCATION: (1)...(7)
          291 <223> OTHER INFORMATION: Consensus sequence for Leucine-based motif.
          293 <221> NAME/KEY: VARIANT
          294 <222> LOCATION: (1)...(1)
          295 <223> OTHER INFORMATION: Xaa is any amino acid.
W--> 297 <221> VARIANT
                                                                                                                                          The second secon
           298 <222> LOCATION: (3)...(5)
           299 <223> OTHER INFORMATION: Xaa is any amino acid.
W--> 301 < 400 > 21
W--> 302 Xaa Glu Xaa Xaa Xaa Leu Ile
          303 1
           306 <210> SEQ ID NO: 22
           307 <211> LENGTH: 7
           308 <212> TYPE: PRT
          309 <213> ORGANISM: Artificial Sequence
          311 <220> FEATURE:
          312 <221> NAME/KEY: SITE
          313 <222> LOCATION: (1)...(7)
          314 <223> OTHER INFORMATION: Consensus sequence for Leucine-based motif.
          316 <221> NAME/KEY: VARIANT
           317 <222> LOCATION: (1)...(1)
           318 <223> OTHER INFORMATION: Xaa is any amino acid.
W--> 320 <221> VARIANT
           321 <222> LOCATION: (3)...(5)
           322 <223> OTHER INFORMATION: Xaa is any amino acid.
W--> 324 < 400 > 22
W--> 325 Xaa Glu Xaa Xaa Xaa Ile Leu
           326 1
                                                        5
           329 <210> SEQ ID NO: 23
          330 <211> LENGTH: 7
          331 <212> TYPE: PRT
          332 <213> ORGANISM: Artificial Sequence
          334 <220> FEATURE:
          335 <221> NAME/KEY: SITE
          336 <222> LOCATION: (1)...(7)
          337 <223> OTHER INFORMATION: Consensus sequence for Leucine-based motif.
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RAW SEQUENCE LISTING

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/05/2007 PATENT APPLICATION: US/10/757,077B TIME: 14:53:28

Input Set : A:\17355CIP3SEQLIST.TXT

Output Set: N:\CRF4\02052007\J757077B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:17; Xaa Pos. 1,3,4,5 Seq#:18; Xaa Pos. 1,3,4,5 Seq#:19; Xaa Pos. 1,3,4,5 Seq#:20; Xaa Pos. 1,3,4,5 Seq#:21; Xaa Pos. 1,3,4,5 Seq#:22; Xaa Pos. 1,3,4,5 Seq#:23; Xaa Pos. 1,3,4,5 Seq#:24; Xaa Pos. 2,3,4

TIME: 14:53:28

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/757,077B

Input Set : A:\17355CIP3SEQLIST.TXT
Output Set: N:\CRF4\02052007\J757077B.raw

L:205 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:17 L:209 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:17 L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 L:228 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18 L:232 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:18 L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0 L:251 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19 L:255 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:19 L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 L:274 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20 L:278 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:20 L:279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0 L:297 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:21 L:301 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:21 L:302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0 L:320 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:22 L:324 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:22 L:325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0 L:343 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23 * 8 L:347 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23 L:348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0 L:366 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:24 L:370 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:24 L:371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0 L:905 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:53 L:926 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:54 L:951 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:55 L:972 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:56 L:976 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:56 L:1001 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:57 L:1022 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:58 L:1047 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:59 L:1068 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:60 L:1093 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61 L:1114 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:62 L:1139 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:63 L:1143 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:63 L:1164 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:64 L:1189 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:65 L:1210 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:66 L:1235 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:67 L:1256 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:68 L:1281 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:69 L:1285 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:69 L:1306 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:70 L:1331 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:71 L:1352 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:72 L:1377 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:73

VERIFICATION SUMMARY

DATE: 02/05/2007 PATENT APPLICATION: US/10/757,077B TIME: 14:53:28

Input Set : A:\17355CIP3SEQLIST.TXT

Output Set: N:\CRF4\02052007\J757077B.raw

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L:1398 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:74
L:1402 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:74
L:1427 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:75
L:1448 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:76
L:1473 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:77 L:1494 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:78
L:1519 M:258 W: Mandatory Feature missing, <220> Tag not found for SEO ID#:79
L:1540 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:80
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